

**Department of Transportation
Project No. 22-101
Rehabilitation of Bridge No. 01649 (Butts Bridge)
State Road (SR) 668 (Butts Bridge Road) over Quinebaug River
Town of Canterbury**

**November 18, 2008 at 7:00 p.m.
Canterbury Town Hall Community Room**

Minutes

Present:

Connecticut Department of Transportation (ConnDOT or Department)

Carl E. Nelson, District 2 Engineering Manager
Julie F. Georges, Transportation Principal Engineer
Mary E. Baker, Transportation Engineer

Close, Jensen and Miller, P.C. (CJM)

E. Allen Randall, Liaison Director
Robert A. Cosker, Project Engineer

Presentation:

Al Botello, Director of the Canterbury Public Works Department, opened the meeting on behalf of First Selectman Brian H. Sear, who was unable to attend the meeting.

ConnDOT's Mary Baker began by recalling that the Department presented at a September 19, 2007 Public Information Meeting, a preliminary project design, which involved a two-stage construction methodology that would maintain alternating one-way traffic across the bridge during construction. She emphasized that the primary purpose of this second Public Information Meeting would be to present the currently proposed construction methodology, which involves closing the bridge and temporarily detouring vehicular traffic over State owned roadways. Ms. Baker then briefly summarized the following information, which was presented at the initial Public Information Meeting:

- ConnDOT's responsibility for initiating and implementing projects to maintain and enhance the State's transportation infrastructure
- CJM's role as Consultant Liaison Engineers retained to supervise the design development of this bridge project
- Project goals of efficiently and cost-effectively rehabilitating Bridge No. 01649, while minimizing disturbance to the travelling public
- Existing Bridge Description
 - Riveted steel through truss structure built in 1937 and rehabilitated in 1988

- Considered an historically significant national and state resource
- Carries one lane of SR 668 traffic in both directions
- Average Daily Traffic (ADT) (2007 data): 1,900 vehicles (5%, or 100±, trucks)
- Overall Length = 231'-6"; Clear Span = 221'-6"
- Widths: between truss centers = 31 ft.; between curbs = 27'-8"
- Reinforced concrete deck on steel stringers framed by steel floor beams
- Reinforced concrete substructure (foundation) on rock
- Reasons for Project
 - Structurally deficient ("poor" condition rating of superstructure steel)
 - Moderate deck slab deterioration
 - Substandard live load rating
 - Paint system failure
 - Functionally obsolete deck width (minimum 28 feet needed to satisfy both functional adequacy and statutory requirements)

CJM's Robert Cosker reviewed the proposed rehabilitation work:

- Replace reinforced concrete deck with a slightly wider (28 ft.) section
- Abrasively blast clean, repair and paint superstructure steel
- Construct lateral restraint mechanisms at bridge bearing locations
- Patch deteriorated substructure concrete above water
- Perform incidental approach roadways work (pavement, drainage and guide railing improvements)

Mr. Cosker continued with a synopsis of project impacts with respect to the following:

- Public Utilities – no anticipated major relocation of overhead telephone, electric and cable television wires south of the bridge
- Environmental Resources – no environmental permits required due to confinement of work to areas above floodplain elevation
- Rights-of-Way – no private property involvement due to substantial width of State right-of-way
- Historical/Cultural Resources Issues – Bridge documentation being conducted to satisfy State Historic Preservation Office mitigation measures

Difficulties encountered with the initially planned stage construction scheme were related by Mr. Cosker:

- On-site traffic maintenance during construction, coupled with spatial constraints imposed by truss structure members, severely restrict available work space
- Substandard traffic load carrying capacity of existing bridge, limits permissible additional weights that will be imposed by Contractor's debris and painting-related containment systems
- Structure movement under live traffic conditions not conducive to proper curing of new deck concrete and efficient steel repair operations

- Seven-day minimum traffic detour required for concrete placement during each stage would be required
- Frequent short-term staged traffic interruptions necessary for operations such as material delivery and loading/unloading

Due to high costs, lengthy construction duration and diminished quality resulting from stage construction, a traffic detour consisting of the following State routes was presented by Mr. Cosker:

- Route 169 in Canterbury
- Route 14 in Canterbury and Plainfield
- Route 14A in Plainfield
- Route 12 in Plainfield and Canterbury

The benefits of detouring traffic during construction were discussed:

- Improved Contractor flexibility in methods used to accomplish work (equipment size, operating space and weight constraints alleviated)
- Increased Contractor production rates result in estimated savings in project duration of at least one full construction season (10-month reduction in traffic disruption time)
- Enhanced quality of finished work
- Cost savings of about \$1,000,000

Ms. Baker and Mr. Cosker concluded the presentation with a project cost and construction schedule update:

- Cost estimated at \$3,800,000; federal funds usage anticipated
- Construction schedule predicated on funding availability: late Spring 2009 to late Fall 2010

Public Comments and Questions:

Approximately 15 people attended the meeting. Among the attendees were Canterbury residents and affiliates of Canterbury Public Schools, the Board of Education, and the Public Works and Fire Departments. Those commenting included:

- Paulette Garosshen, the Public Schools Transportation coordinator, submitted, expressed concerns related to the proposed temporary bridge closure and traffic detour. Ms. Garosshen also submitted in a letter addressed to ConnDOT, her position regarding the detour.
 - In addition to Canterbury school students, students shuttled to and from Norwich Free Academy and Norwich Technical High School are transported by Canterbury buses to Griswold High School.
 - The proposed detour will necessitate 3 additional buses and drivers to meet schedules.
 - Students 14-16 years of age are currently picked up at 5:25 a.m.; these students would have to be picked up 20 minutes earlier, and drop-off times at the end of the day would be similarly delayed.

- The estimated cost to the Town (based on 180 days) is \$ 20,000.
- Receipt of grant money from the State to defer added bussing costs during construction, was sought.

Response: ConnDOT will investigate available remedies to ease the burden on school bus transportation.

- A Board of Education representative questioned the feasibility of and manner in which buses transporting students residing on Butts Bridge Road would turn around with the bridge closed.

Response: The Department can construct temporary cul-de-sacs at each end of the work site to facilitate bus turn-around.

- The Town's Mr. Botello indicated that the Public Works Department has no noteworthy concerns related to the proposed detour, provided that the previously mentioned temporary turn-around areas are provided for usage by roadway maintenance vehicles and plows.

- A number of residents questioned the SR 668 traffic count data presented.

Response: ConnDOT's 2007 ADT of 1,900 vehicles represents a 300 vehicle-per-day decrease in the 2006 ADT of 2,200 vehicles cited at the initial Public Information Meeting. A traffic study conducted by CJM in conjunction with the proposed detour supports the present data.

- A resident asked if consideration had been given to what would happen in the unlikely event that the Route 14 bridge crossing of the Quinebaug River were out of service while the detour is in effect.

Response: The simultaneous outage of both crossings is considered an extreme emergency event for which contingency planning is not included in the project design. ConnDOT maintains a statewide detour routing plan for such emergency occurrences.

- A resident inquired as to the possible use of precast concrete panels to expedite the deck replacement operations.

Response: The considerable weight of precast units and size of the equipment required for their positioning, preclude the use of such deck panels. Additionally, the multiple joints in the new deck structure would present problems with respect to future maintenance.

- The owner of a recently established business (Josie's General Store) on SR 668 stated that he is experiencing difficulties maintaining the store as a viable enterprise even under the present circumstances. He contended that if SR 668 is closed to through traffic for construction, his business will certainly fail. He asked if ConnDOT had any means of compensating commercial establishments for lost business.

Response: The Department regrettably has no known means of providing financial compensation for businesses impacted by construction.

- ConnDOT's Julie Georges expressed her commitment to compressing the construction duration as much as possible and refining the schedule such that the detour would not be implemented until the end of the school year.

Adjournment: The meeting was adjourned at approximately 8:30 p.m.